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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/533,180

04/29/2005

Peter John James

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05/25/2010

KRUGLIAK, WILKINS, GRIFFITHS & DOUGHERTY CO, LPA
4775 MUNSON STREET N.W.
P.O. BOX 36963
CANTON, OH 44735-6963

EXAMINER

O'HERN, BRENT T

ART UNIT

PAPER NUMBER

1783

MAIL DATE

DELIVERY MODE

05/25/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/533,180	Applicant(s) JAMES, PETER JOHN	
	Examiner BRENT T. O'HERN	Art Unit 1783	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims

1. Claims 1-21 are pending.

WITHDRAWN REJECTIONS

2. All rejections of record in the Office action mailed 1/11/2010 have been withdrawn due to Applicant's amendments in the Paper filed 2/5/2010.

NEW REJECTIONS

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

4. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. The phrase "as hereinbefore defined" in claim 20, line 3 is vague and indefinite since it is unclear how the growing was defined.

Clarification and/or correction is required

Claim Rejections - 35 USC § 103

6. Claims 1-4, 6, 8-11, 13, 16-18 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hess et al. (US 3,420,671) in view of Fiala et al. (US 4,012,535).

Hess ('671) teaches a method of processing a legume fodder crop and a method of producing an animal feed (*See col. 1, l. 19-47 and col. 3, ll. 12-37.*) including the

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steps of growing a legume fodder, harvesting the crop (*It is known that all processed fodder at a feed mill has clearly been previously grown and harvested otherwise it would not exist.*), processing the crop with a hammermill/rotary knives (*See col. 1, l. 41-47 and col. 3, ll. 12-32 where hammermills are known to have different heads, including knife-like surfaces, especially when the edges become worn.*); drying the shredded material to produce a dried animal feed material for long term storage (*See col. 3, ll. 12-37.*); mixing the dried material with a syrup or other binder and enzymes that modify the material to improve digestion of the feed, thus, increasing the value of the feed (*See col. 1, l. 19-47 and col. 3, ll. 12-37.*); and then combining the materials into pellets (*See col. 1, l. 19-47 and col. 3, ll. 33-37.*), however, fails to expressly disclose “providing a sugar cane mill next to a feed mill”, “drying the shredded material using heat supplied by the cane sugar mill or from by-products of the cane sugar mill to produce a dried animal feed material, said animal feed material being dry enough for long term storage” per independent claims 1, 11, 16 and 18; “is delivered to the feed mill in bulk using a transport system/infrastructure used to transport said sugar cane crop in bulk to the cane sugar mill” in claim 3, lines 2-3; “wherein: in step (f), the shredded matter is dried using hot flue gas from the sugar mill boiler, or from a separate furnace fired with sugar cane bagasse either fresh from the cane sugar mill or from a stockpile” in claim 6, lines 1-4 and the shredded material being dried.

Regarding the above phrases with respect to the relative locations of the sugar cane and feed mills and legume fodder field, Fiala ('535) teaches that there has always been a thought that bagasse might be upgraded by recombining it with blackstrap

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molasses, a sugar mill byproduct (*See col. 1, l. 55-68 col. 2, l. 49 to col. 3, l. 16.*). Fiala ('535) teaches blending at or near the sugar mill would incur no shipping costs, and little handling cost for either raw material component. Fiala ('535) discloses that a South African sugar milling company is interested in designing and building bagasse/molasses animal feed factories adjacent to sugar mills (*See col. 2, ll. 49-57.*). Fiala ('535) discloses that a sugar mill near Tampa, Florida set up a facility for making animal feeds from bagasse/molasses combinations(*See col. 2, ll. 49-57.*). Fiala ('535) discloses that it is advantageous to locate plants adjacent or near each other because of the reduced handling and shipping savers (*See col. 1, l. 55-68 col. 2, l. 49 to col. 3, l. 16.*).

Regarding the above phrases with respect to the relative locations of the sugar cane and feed mills and legume fodder field, where the source of heat comes from and what type of equipment is used to transport the material to the mill does not have any material affect on the method of processing legume fodder. Whether the locations are next to each other, separated by a warehouse, road, are ten miles apart or 100 miles apart or there is not a cane sugar mill at all does not make any difference to the method of processing the legume or affect the product being produced. Whether the heat source comes from a sugar cane mill or from a gas fired boiler makes no difference to the method of processing the legume fodder.

The language regarding "soil enhancing" in claims 1 and 11, line 6 has been considered, however, does not further define the method of processing a legume fodder as the reason why you may grow a crop does not set forth any further process steps or change the structure of the legume fodder.

Fiala ('535) teaches drying feed material (*See col. 13, l. 7 to col. 14, l. 35.*) for the purpose of providing high density dry feed (*See col. 14, ll. 1-35.*). Furthermore, it known to a person having ordinary skill in the art that once plants are cut they die or die naturally and the inner plant materials become dry through dehydration. Additionally, it is known that if feed materials become excessively wet they will degrade, thus, there is an interest to maintain the integrity of the feed by drying.

It would have been obvious to a person having ordinary skill in the art at the time Applicant's invention was made to source the legume fodder from any location that is economically feasible with locations closer to the mill probably being less expensive than locations farther away due to the lower fuel costs involved in transporting. It would have been obvious to a person having ordinary skill in the art at the time Applicant's invention was made to use any transportation equipment to transport the fodder to the mill with the least expensive mode being preferable. There is clearly motivation to use the least expensive transportation mode since this provides for greater profit. It would have been obvious to a person having ordinary skill in the art to use the least expensive energy source and consider all options available and if the least expensive source is from a neighboring mill then it would have been obvious to use it.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time Applicant's invention was made to dry the feed material as taught by Fiala ('535) in Hess ('671) and source the raw material in the above manner from the above location and source the energy as described above in order to provide a food with high density and good integrity at a low cost.

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7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hess et al. (US 3,420,671) in view of Fiala et al. (US 4,012,535) and Smith et al. (US 2,143,835).

Hess ('671) and Fiala ('535) teach the method discussed above, however, fail to expressly disclose juice is extracted from the legume fodder crop, concentrated and stored in liquid concentrate tanks.

However, Smith ('835) teaches extracting, concentrating and storing juice from legume fodder (*See col. 4, l. 68 to col. 5, line 3.*) for the purpose of preserving the greens and providing a source of liquid that may be added to food with the desired concentration and at the desired time (*See col. 4, l. 68 to col. 5, line 3.*).

Therefore, it would have been obvious to extract the juice from Hess' ('671) fodder as taught by Smith ('835) and store it in tanks so as to preserve the fodder and provide a quantified source of juice that can be added back to food at the desired time.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hess et al. (US 3,420,671) in view of Fiala et al. (US 4,012,535) and Kieter (US 2,091,284).

Hess ('671) and Fiala ('535) teach the method discussed above, however, fail to expressly disclose wherein the dried shredded material is separated into coarse (stem) and fine (leaf) dry fibre fractions.

However, Kieter ('284) teaches separating shredded material into coarse (stem) and fine (leaf) dry fibre fractions (*See p. 2, col. 1, ll. 1-41 and p. 3, col. 1, line 26 to col. 2, l. 25.*) for the purpose of providing a preserved feed material that has a high protein

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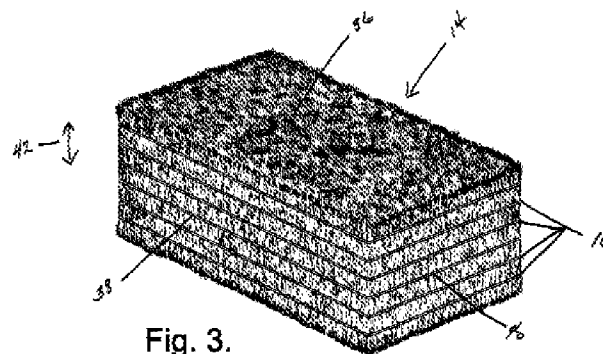
concentration that can be remixed in the final formulation (*See p. 1, col. 2, ll. 3-33 and p. 2, col. 1, ll. 1-41.*).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time Applicant's invention was made to separate the coarse and fine material in order to provide a feed with high protein feed with preserved protein and uniform concentration.

9. Claims 12, 14-15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hess et al. (US 3,420,671) in view of Fiala et al. (US 4,012,535) and Myhre (US 6,579,552).

Regarding claims 12, 14 and 19, Hess ('671) and Fiala ('535) teach the method discussed above, however, fails to expressly disclose bailing the dried and shredded material and outloading or containerizing it for transport.

However, Myhre ('552) teaches bailing dried alfalfa hay (*See col. 1, ll. 13-22, col. 3, l. 34 to col. 4, l. 21 and FIGS 1-3.*) for the purpose of providing a compact mass of hay that can be shipped to foreign countries via containers or other shipping means (*See col. 1, ll. 13-22.*).



Therefore, it would have been obvious to a person having ordinary skill in the art at the time Applicant's invention was made to bail Hess' ('671) material into a compact mass as taught by Myhre ('552) so that it can be shipped to distant destinations.

Regarding claim 15, Hess ('671) and Myhre ('552) teach the method discussed above, however, fail to expressly disclose molasses being mixed with dried material (or hay) to increase the nutritional value thereof.

However, Fiala ('535) teaches adding molasses to animal feed (*See col. 1, ll. 55-68, col. 6, ll. 5-20 and Abstract.*) for the purpose of providing an animal with nutrients (*See col. 1, ll. 55-68.*).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time Applicant's invention was made to add molasses to feed as taught by Fiala ('535) in Hess ('671) in order to provide an animal feed with nutrients.

ANSWERS TO APPLICANT'S ARGUMENTS

10. In response to Applicant's arguments (*See pp. 7-8, of Applicant's Paper filed 2/5/2010.*), it is noted that said arguments are persuasive in overcoming the previous rejections.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRENT T. O'HERN whose telephone number is (571)272-6385. The examiner can normally be reached on Monday-Thursday, 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on (571) 272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brent T O'Hern/
Examiner, Art Unit 1783
5/22/2010